

Ledford Island data are presented here. Similar abridged life table data from Toqua and Averbuch, obtained from Parham (1982) and Berryman (1981), respectively, are presented in Tables 7.2 and 7.3. While a slight difference exists in the Averbuch aging categories compared to the other two populations (for example, a 0-1.5 age category as opposed to 0-1), this discrepancy does not affect the **general** relationships between the demographic curves. Proportional values are obtained by distributing individuals with unknown age over all of the age categories.

### Stature Analysis

Stature estimates of skeletons from the Mouse Creek Phase sites are compared by an Analysis of Variance regression procedure which determines the relationship between one dependent Y variable (stature) and independent X variables (site). A Duncan's Multiple range test is employed to analyze the main effect means of a group of observations (stature estimates) and separates these observations into distinct groups based on the classification variable(s) used (in this instance, site; Ray 1982:151). Both procedures are accomplished with the PROC:GLM analysis of SAS (Ray 1982:139-199). The pooled Mouse Creek Phase long bone length data are then compared in similar analyses to those from Toqua and Averbuch (see Parham 1982 and Berryman 1981, respectively). Only the femur is used in the stature comparison. The stature analysis is performed on males and females separately, and only adults older than 20 are included in the study.

### Pathological Comparison

Porotic hyperostosis is a general descriptive term for osteoporotic lesions occurring mainly on the cranial vault and eye orbits (Angel 1966, 1967), while cribra orbitalia is a more specific term referring to "bilateral pitting of the orbital portion of the frontal bone" (Steinbock 1976:213). In the New World, both disease manifestations are linked to nutritional deficiencies, especially those of iron. These deficiencies, in turn, are often related to prolific maize consumption by New World prehistoric groups (El-Najjar et al. 1975, 1976). Not only is maize naturally low in iron, but it also contains phytic acid which binds to available body iron to prevent its absorption and use. Zimmerman and Kelley (1982:75) note the higher prevalence of iron-deficiency anemia in young children (particularly of weaning age) and adults regularly experiencing blood loss (young females). Because the specific relationship between porotic hyperostosis and cribra orbitalia is unclear (Ortner and Putschar (1981) note that they can occur independently), their frequencies are tabulated and compared across Toqua (Parham 1982), Averbuch (Berryman 1984b) and the Mouse Creek Phase separately.

Periostitis is a non-specific infectious inflammation commonly attacking the periosteum of long bones (Steinbock 1976:60), especially tibiae. In terms of disease etiology, periostitis cannot generally be attributed to one particular disease process (Ortner and Putschar